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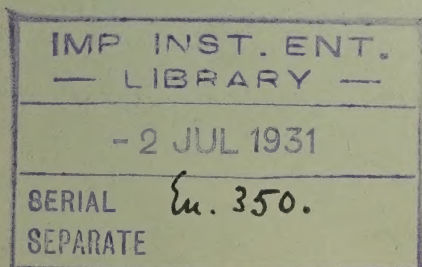






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INSECTA

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# XI. INSECTA

BY

THE IMPERIAL INSTITUTE OF ENTOMOLOGY

## FOREWORD

THE attention of readers is directed to the fact that owing to the necessity of keeping the "Insecta" part within reasonable limits, entomological papers written entirely from an economic standpoint are omitted, but abstracts of these will be found in the *Review of Applied Entomology*. Very brief systematic papers, usually those dealing only with a single species, are noticed in the systematic portion only and do not appear in the list of titles.

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*Coleoptera*: BORCHMANN, *Ectenostoma* (Cistel.), revision, 286; BURGEON, *Graphipterus* (Carab.), monograph, 390, Cicindelids of the Congo, 392, distribution of Panagaeini (Carab.) in Belgian Congo, 393; KLEINE, *Cautires* (Lycid.), key, 1385; OEBENBERGER, *Aphanisticus* (Buprest.), list, 1951, *Cylindromorphus* (Buprest.), list, 1953; OCHS, Gyrinidae, Belgian Congo, supplement, 1962; REICHENSBERGER, Paussidae, Belgian Congo, supplement, 2236, Clavigeridae of Belgian Congo, 2237; SICARD, Coccinellidae of Belgian Congo, 2494; THÉRY, *Pseudagrilus* (Buprest.), catalogue, 2679.—*Hymenoptera*: ARNOLD, Sphegidae, check-list, 82; COCKERELL, Anthidiinae (Apid.), key, 499; MASI, *Brachymeria* (Chalc.), Somaliland, 1733; MENOZZI, Formicidae

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*Lepidoptera*: MEYRICK, Microlepidoptera, 1791.—*Neuroptera*: NAVÁS, *Cintameva alluardi*, sp. n., 1899.

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*Hymenoptera*: WILKINSON, *Microplitis* (Bracon.), revision, 2941.—*Lepidoptera*: GAEDE, Epilemidae (contd.) and Notodontidae, revision, 890; TOXOPEUS, Lycaenidae, 2720.

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*Insecta*: new insects described in 1929 from Japan, 5.—*Coleoptera*: BLAIR, *Paloris* (Tenebr.), Indian spp., 237; CAMERON, Staphylinidae of India, 410; FLEUTIAUX, Eucnemidae, French Indo-China, 814; HUSTACHE, Curculionidae from India, 1206; KÔNO, Melandryidae of Sachalin, Japan, 1427, Apoderini of Japan (Curc.), 1430, Cleridae of Japan, geographical distribution, 1431; MITSUHASHI, Cerambycidae of Hokkaido, Japan, list, 1811; MIWA, Elateridae from Sakhalin and Kuriles, 1814, geographical distribution and list of Copridae from Formosa, 1815, Elateridae of Formosa, 1816, 1817; OCHS, catalogue of Indian Gyrinoidea, 1959; OHTA, Ptinidae of Japan, 1974, 1975; RIBEIRO, supplement to Indian Paussidae, 2259; UHMANN, *Lasiochila* (Hispid.), list, 2764; VOSS, Byctiscini (Curc.), revision, 2851.—*Hymenoptera*: ALLEN & JAYNES, *Tiphia* (Scol.), revision, 49; ISHII, Encyrtinae of Japan, 1232; SANTSCHI, *Crematogaster* (Formic.), key to Japanese spp., 2355; UCHIDA, Ichneumonidae of Japan, 2749-2753; WHEELER, Chinese ants, list, 2927.—*Lepidoptera*: ESAKI, butterflies of Yakushima and Kyushu Is., 744; DE JOANNIS, Heterocera of Tonkin, 1270; KANO, Rhopalocera of Hôkotô Is. (Pescadores), 1311; KAWADA, Limacodidae of Japan, list, 1333; KÔNO, butterflies of Daisetsu Mts., list, 1432; MATSUMURA, Papilionidae of Japan, 1740, Arctiidae, Japan, catalogue, 1750; MELI, Brahmaeidae and Eupterotidae of China, revision, 1761; NOMURA, butterflies of the Hôko Is., Japan, list, 1933; PROUT, *Lepidoptera* of Hainan, catalogue, 2175; SONAN, butterflies of Hôko Is. (Pescadores), 2545; SUZUKI, Cymatophoridae of Japan, 2621.—*Diptera*: BOREL, mosquitos of Cochinchina and S. Annam, 287; KOIDZUMI,

Anophelines of Formosa, 1417; SHIRAKI, Syrphidae of Japanese Empire, 2485.—*Siphonaptera*: SHARIF, Indian Pulicidae, revision, 2470.—*Trichoptera*: KUWAYAMA, Stenopsychidae of Japan, 1488; MARTYNOV, Trichoptera of China (excluding Szechwan), list, 1730.—*Hemiptera*: ESAKI, Japanese and Formosan Gerridae, Veliidae and Mesovelidae, list, 745; KATO, Japan, Membracidae, 1327; KUWAYAMA, Psyllidae of Japan, 1494; MATSUMURA, Dictyophorinae, Japan, monograph, 1741, Issidae of Japan, 1743; RAMAKRISHNA AYYAR, S. Indian Coccidae, 2193; TAKAHASHI, Coccidae of Formosa, 2640.—*Thysanoptera*: MOULTON, Japanese Thysanoptera, list, 1849.—*Psocoptera*: OKAMOTO, Japan, 1979.—*Odonata*: BARTENEFF, *Calopteryx splendens* and Western Asiatic races, 155; FRASER, India, 841; LAIDLAW, synonymic list of Gomphidae, 1511; NEEDHAM, China, monograph, 1908, key to genera of Japanese Odonata, 1911.—*Orthoptera*: SHIRAKI, Gryllotalpidae and Gryllidae of Japanese Empire, 2484; WILLEMSE, *Systella* (Acrid.), preliminary revision, 2946.—*Thysanura*: SILVESTRI, Indian Japygidae, 2504.

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BAU, Pupipara from Sunda Is., 163; FREY, Platystomidae, Philippines, 845; KARL, Anthomyid from Java, Sumatra and Bali, 1318; KRÖBER, Therevidae and Conopidae from Sunda Is., 1470; MALLOCH, *Actia* (Tachin.), key to Malayan spp., 1689; SCHUURMANS STEKHOVEN, Tabanids collected in Celebes and adjacent isles, 2422.—*Lepidoptera*: VAN EECHE, Heterocera from Sumatra, 719; WEST, new Philippine Geometridae, 2918; WILMAN, new Philippine Noctuidae, 2940.—*Trichoptera*: ULMER, Philippines and Sunda Is., 2768.—*Hemiptera*: DRAKE, new Philippine Tingidae, 674; GREEN, Coccidae, Sumatra, 936; HARRIS, Nabidae, Philippines, 1033; KRISHNAMURTI, Aphidae of Mysore, 1460; MUIR, Fulgoridae from Krakatau, Verlaten and Sebesi Is., 1858.—*Thysanoptera*: PRIESNER, *Ecacanthothrips*, revision, 2171.—*Isoptera*: KEMNER, Sumatra, 1344; LIGHT, list of Philippine Termites, 1308; WEYER, *Microcerotermes amboinensis* and *Pro-rhinotermes rugosus*, sp. n., Sunda Is., 2920.—*Odonata*: LIEFTINCK, Dutch E. Indies, additions, 1604; RIS, new Philippine Calopterygidae, 2277.—*Orthoptera*: CHOPARD, list of Bornean Gryllidae, 456; WILLEMSE, Acrididae of Sumatra, 2947, 2948.—*Thysanura*: SILVESTRI, Malayan Japygidae, 2504.—*Collembola*: HANDSCHIN, Philippines, 1018.

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*Coleoptera*: CARTER, *Ebenolus aruensis* sp. n. (Tenebr.), 433.—*Diptera*: PARENT, *Chrysosoma cognatum* sp. n. (Dolichop.), 2014.—*Orthoptera*: HANTSCH, *Pseudoplatia atra* gen. et sp. n. (Blatt.), 1020.

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*Coleoptera*: LEA, *Eupholocis maculatus* gen. et sp. n. (Curc.), New Britain, 1545.—*Hymenoptera*: COCKERELL, *Pachytomus risbeci*, *Podagrion dolichurum*, abbreviatum spp. n. (Chalc.), New Caledonia, 482; HAUPT, *Otenostegus anomalus* sp. n. (Psammoch.), 1051.—*Lepidoptera*: COLLENETTE, *Lymantria sphaerata* sp. n., New Ireland, 508; GAEDE, *Omichlis* spp. n. (Notod.), New Britain, 890; MEYRICK, *Cynomastix rthodoxa* gen. et sp. n. (Tin.), New Caledonia, new Tineidae, New



Britain, *Nemotois cyanochrysta* (Adel.), New Ireland, new Tortricids, 1789.—*Diptera*: ALEXANDER, new Tipulidae, New Caledonia, 26. — *Hemiptera*: COCKERELL & BUEKER, *Antonina littoralis* sp. n., New Caledonia, 502; SCHADOW, *Halobates maculatus* sp. n. (Hydrom.), Ekalin, 2365.

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*Coleoptera*: CARTER, new species, 433, 434; DIDIER, *Cyclommatus spinus* (Lucan.), 642; GILLET, list of Onthophagini (Coprid.), 920; KLEINE, *Meliorrhynchus*, *Cladophorus* (Lycid.), *Ithysten* (Brenth.), spp. n., 1384; LEA, *Eutinophaea papuensis* sp. n. (Curc.), 1545; PIC, new *Coleoptera*, 2108, 2109; VOSS, *Euops viridiceps*, sp. n. (Curc.), 2852.—*Lepidoptera*: COLLENETTE, new Lymantriidae, 508; GAEDE, new Notodontidae, 890; HAMPSON, *Chrysoscinia plicata* (Pyr.), 1015; JORDAN, new *Lepidoptera*, 1296-1299; MEYRICK, new Microlepidoptera, 1789; ROBER, *Euchromia poecilosoma*, *xanthozona*, spp. n. (Synom.), 2280; TOXOPEUS, *Amblypodia hercules* subspp. n. (Lycan.), 2720.—*Diptera*: EDWARDS, *Rachionotomyia littlechildi* sp. n. (Culic.), 717.—*Trichoptera*: NAVÁS, *Macronema loriae* sp. n., 1899.—*Hemiptera*: DISTANT, *Olovina humboldtiana*, *moreshyensis*, spp. n. (Cercop.), 651; HOBVÁTH, *Hebrus papuanus*, *peculiaris*, spp. n. (Hebrid), 1179; SCHMIDT, new Homoptera, 2386.—*Embiopoda*: NAVÁS, *Oligotoma alberti* sp. n., 1899.—*Orthoptera*: GÜNTHER, Phasmoidea of New Guinea, 989; HANITSCH, new Blattidae, 1020; KARNY, *Gryllacris*, list, 1320, 1323; RAMME, new Acrididae, 2200; SJÖSTEDT, *Valanga nobilis* sp. n. (Acrid.), 2512; WERNER, new Mantidae, 2911.

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*Coleoptera*: HORN, *Therates basalis*, subspp. n. (Cicind.), 1178.—*Lepido-* (N-4348 j) q

*ptera*: MEYRICK, new Microlepidoptera, 1789.—*Diptera*: PARENT, *Chrysosoma salomonis* sp. n. (Dolichop.), 2014.—*Hemiptera*: LAING, new Coccidae, 1515; VAN DUZEE, *Bedunia adusta* sp. n. (Lygaeid.), 2802.—*Orthoptera*: WERNER, *Hierodula salomonis* sp. n. (Mant.), 2914.

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*Orthoptera*: SJÖSTEDT, *Valanga tenimberensis* sp. n. (Acrid.), 2512.

#### Australia and Tasmania.

*Insecta*: MUSGRAVE, insects of Mt. Kosciusko, Aust. Mus. Mag., Sydney 4 1930 pp. 103-107.—*Coleoptera*: ARROW, *Hemipeplus australicus* sp. n. (Hemipepl.), 84; CARTER, Cistelidae, check list, 432, new *Coleoptera*, 433, 434; DEANE, Trichopterygidae, 612; ELSTON, new *Coleoptera*, 730; KLEINE, new Lycidae, 1390; LEA, new *Coleoptera*, 1544-1546; MARSHALL, *Strongylorhinus clarki* sp. n. (Curc.), 1718; PIC, *Chauliognathus pulcher* sp. n. (Teleph.), 2108.—*Hymenoptera*: CLARK, ants of Rottneest I., 469, *Dolichoderus* (Form.), revision, 470, new Formicidae, 471, 472; COCKERELL, Apidae, revision, 485, *Cerceris* spp. n. (Spheg.), 489, new Apidae, 490, 493; DODD, Teleasinae (Proctotr.), revision, 657, new Proctotrypoidea, 658; GIRAULT, new Chalcidoidea, 922; RAYMENT, Australian bees, 2209-2211; WHEELER, *Aphantolepis quadricolor* gen. et sp. n. (Form.), 2931.—*Lepidoptera*: HAMPSON, *Procuneia siderea*, *Auchmera melanodes*, gen. et spp. n. (Pyr.), 1015; MEYRICK, *Scorpiopsis rhodoglaucia* sp. n. (Tortr.), 1789; TURNER, Oenochrominae (Geom.), revision, 2741, new *Lepidoptera*, 2742; WARREN, new Noctuidae, 2886.—*Diptera*: ALEXANDER, new Tipulidae, 24, *Radinoderus dorrigenis* sp. n. (Tanyder.), 33; CRESSON, *Hyadina pullipes* sp. n. (Ephydr.), 562; CURRAN, *Ephydroscinis raymenti* sp. n. (Chlorop.), *Rutilla* spp. n. (Tachin.), 585; HARDY, revision of Dolichopodidae, 1026, Empididae, 1027, Braconyphalini (Asil.), 1030; MALLOCH, *Actia darwini* sp. n. (Tach.), 1689, Tachinids and other *Diptera*, 1690; PARENT, *Chrysosoma* spp. n. (Dolichop.), 2014; TAYLOR, *Anopheles* of Australia, 2658.—*Neuroptera*: BANKS, *Oecetina australis* sp. n., Bull. Mus. Comp. Zool.

Harvard 64 1920 p. 350; KIMMINS, *Stenobiella pulla* sp. n. (Berothid.), 1364.—*Hemiptera*: COCKERELL & BUEKER, *Pseudococcus hystricosus*, *Trionymus angustus*, spp. n. (Cocc.), 503; FROGGATT, *Apiomorpha* spp. n. (Coccid.), 864; GODING, *Pogon flavescens* sp. n. (Membrac.), 925; MUSGRAVE, Graphosomatinae of Australia (Pentat.), 1875.—*Thysanoptera*: MORISON, new species, 1837, 1838; MOULTON, *Carcinotrips lei* gen. et sp. n., 1850.—*Isoptera*: NICHOLLS, *Ahamitermes hilli* sp. n., J. Roy. Soc. W. Aust. 15 1929 p. 20.—*Ephemeroptera*: LESTAGE, *Tasmanocoenis tonnoiri* sp. n., 1588.—*Dermaptera*: MENOZZI, *Forficula modesta* sp. n., 1763.—*Orthoptera*: SJÖSTEDT, Australian Acrididae, 2511; TINDALE, *Rawarena paraoxypila* gen. et sp. n. (Mant.), 2704; KARNY, *Anostostoma spinosum* sp. n. (Tettig.), 1321.—*Thysanura*: SILVESTRI, *Japyx* spp. n., 2500.

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*Coleoptera*: LIEBKE, *Colliurus* (Carab.), subfam., revision, 1602.—*Hymenoptera*: CREIGHTON, *Solenopsis* (Form.), revision, 557.—*Lepidoptera*: DRAUPT, Noctuidae, revision, 677; GAEDE, Uraniidae, revision, 889; HALL, *Phyciodes* (Nymph.), revision, 1008.—*Diptera*: ALDRICH, *Stylogaster* (Conop.), revision, 20.—*Hemiptera*: BARBER, Stenopodinae, 136; JACZEWSKI, *Mesorelia*, key, 1247; MELIN, *Mononyx* (Gelast.), revision, 1759.—*Psocoptera*: CHAPMAN, *Isotecnomera*, 441.

#### North America.

*Insecta*: BROWN, Entomological Record, 1929, Canada, 348; CLARKE, insects new to British Columbia, with additions and corrections to check list of Macrolepidoptera, 473.—*Coleoptera*: BLAISDELL, Liesthini (Endomych.), revision, 241; BLATCHLEY, Scarabaeidae of Florida (cont.), 246; BRADLEY, genera, North of Mexico, 315a; BROWN, *Eanus* (Elater.), revision, 351; HORN, Cindelidae, list, 1177; LINSLEY, *Pogonocherus*, *Ecyrus* (Cerambyc.), key, 1633; PIERCE, Anthribidae, revision, 2118; PSOTA, *Moneilema* (Lamiid.), 2180; RIVNAY, Rhipiphoridae, revision, 2279.—*Hymenoptera*: CUSHMAN, *Odontomerus* (Ichn.), revision, 592; GRAENICHER, bee-fauna and vegetation of the

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Vol. lxiv, 1927, no. 2900, for "36" read "26"

Vol. lxv, 1928, no. 194, for "BEQUAERT, J." read "BEQUAERT, M."

" " " " 1443, for "pp. 41-47" read "pp. 141-147"

" " " " 1938 and p. 114 for "THORPE, B. A." read "THORPE, W. H."

Vol. lxvi, 1929, no. 53, for "pp. 349-350" read "pp. 549-550"

" " " " 522, for "37" read "19"

" " " " 1364, for "KOMINSKY" read "KOSMINSKY"

" " " " 1374, for "pp. 48-58" read "pp. 46-58"

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*Aoploninus posticatus* Mshl. (= *biarctuatus* Hllr.) from *Timola* p. 106, HELLER Ent. Bl. 26.

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*Aporimus* gen. n. for *Cneorrhinus viridanus* Boh. (type), *C. languidus* Boh., *C. oblongus* Boh. p. 558, MARSHALL Ann. Mag. N.H. (10) 6.

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*Baris signatus* Wlk. (= *Mecinus relictus* Wlk.) from *Apotomorrhinus* p. 576, MARSHALL t.c.—*B. suradense* sp. n. Madras p. 18 fig., HUSTACHE Miss. Babault Inde. Curc. 1928.—*B. intermedia* sp. n. Jura p. 192, HUSTACHE Bull. Soc. ent. Fr. 1930.—*B. lebedevi* sp. n. Transcaspiia p. 56, ROUBAL Acta Soc. ent. Čech. 26 1929.—*B. lineolatus* see *Hoplitopaes*.

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*Brachyceropsis* Auriv. (= *Xenostes* Simps.) *verrucosa* F. (= *jamesoni* Simps.) p. 574, MARSHALL Ann. Mag. N.H. (10) 6.

*Brachycerops* *intutus* Gyll. (= *acerbus* Gyll.); *scutirostris* Gyll. (= *crispatorostris* Gyll.); *fascicularis* Ol. (= *cristatus* Pér.); *capito* Pasc. distinct from *stellaris* Ol.; *inaequalis* Ol. (= *dorsomaculatus* Qued.) distinct from *tauriculus* Sparrm.; *thunbergi* Gyll. (= *inaequalis* Thunb. nec Ol.); *zeyheri* Gyll. (= *ebullinus* Pér.); *atrox* Gerst. (= *gryphus* Pasc.); *annulatus* Gerst. (= *honorabilis* Brancsik); *indutus* Pér. (= *loquax* Hartm.); *margaritaceus* Germ. distinct from *tuberosus* Wied.; *strumosus* Pasc. (= *mamillatus* Aur.); *vestitus* Gyll. (= *piger* Gyll.); *detritus* Thunb. (= *pustulosus* Gyll.); *tauriculus* Sparrm. (= *reflexus* Gyll., *nebulosus* Ol.) p. 573; *variolosus* Ol. (= *rugipes* Gyll.); *fasciculosus* Germ. (= *setiger* Gyll.); *gemmatus* Ol. (= *tuberosus* Wied.); *gemmifer* Germ. (= *ulcerosus* Gyll.); *erinaceus* Ol. (= *varius* Pér.) p. 574, MARSHALL t.c.

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*Byctiscus* key p. 195, *populi* ff. n. *transbaicalia* p. 197, *semicuprea* Far East; *lucidus*, *fulminans* p. 199, *foveostriatus* p. 200 spp. n.; *lacunipennis* subsp. n. *subtilis* China, *collaris* Formosa, *amurensis* Siberia, Korea, *yunnanicus* Yunnan p. 199, Voss Koleopt. Rdsch. 16.—*B. regularis* sp. n. Siberia p. 79, Voss Wien. ent. Ztg. 47.

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*Cholus (Curculio) spinipes* F. (= *wattsi* Mshl.) p. 574, MARSHALL Ann. Mag. N.H. (10) 6.

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*Cneorrhinus viridanus*, *languidus*, *oblongus* see *Aporimus*.

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*Coelosternus sulcatus* morphology pp. 161-164 figs., LEONARD J. Dept. Agric. Porto Rico 14.

*Colobodes* Schönh. (= *Aryptaeus* Pasc. type *suturalis* Pasc.), *bilbergi* Boh. (= *pustulosus* Pasc.) p. 566, MARSHALL Ann. Mag. N.H. (10) 6.

*Conotrachelus* key p. 20, *obtusidentatus* p. 27, *dufaui* p. 28, *guadelupensis* p. 29, *obscurus* p. 32, *hirsutipennis* p. 33, *brevicrinatus*, *cinnamomus* p. 34, *coelosternoides* p. 35, spp. n. Guadeloupe figs., HUSTACHE Faune Colon. français. 4.—*C. nenuphar* bionomics 90 pp. figs., SNAPP Tech. Bull. U.S. Dept. Agric. 188.—*C. cinereus* p. 158, *asperatus* p. 159, *setiferus* p. 160, *nigromaculatus* p. 161, spp. n. U.S.A., VAN DYKE Pan-Pacific Ent. 6.

*Coptorhamphus* see *Seleuca*.



*Cosmopolites sordidus* Germ. (= *Sphenophorus cribricollis* Wlk.) p. 576, MARSHALL Ann. Mag. N.H. (10) 6.

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*Cryptorrhynchus mangiferae* F. (= *ineffectus* Wlk.); *fasculaticollis* Wlk. from *Desmidophorus* p. 576, MARSHALL Ann. Mag. N.H. (10) 6.—*C. vezatus* see *Niphades*; *notabilis* see *Camp-torrhinus*; *assimilans*, *declaratus* see *Mecistocerus*.

*Curculio biguttatus* see *Euscelus*; *spinipes* see *Cholus*; *trifasciatus* see *Heilipus*.

*Cybianerus argenteus* Boh. (= *Polydus donceli* Bovie); *pascoei* Bovie from *Polydus* p. 572, MARSHALL Ann. Mag. N.H. (10) 6.—*C. atrox* see *Polydus*.

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*Derelomus plagiatus* Fhs. (= *ciliatus* Hust.); *subvittatus* Fst. ♂ (= *maynei* Hust.); *kamerunicus* Fst. ♂ (= *callosus* Hust.); *k.* Fst. ♀ (= *congoanus* Hust.) p. 575, MARSHALL Ann. Mag. N.H. (10) 6.

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*Desmidophorus discriminans*, *communicans* see *Amphialus*; *fasciculaticollis* see *Cryptorrhynchus*.

*Diaporesis dufauvi* sp. n. Guadeloupe p. 137, HUSTACHE Faune Colon. français. 4.

*Diaprepes distinguendus* var. n. *guadelupensis* Guadeloupe p. 184, HUSTACHE op. cit. 3 1929.

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*Dorytomorpha* gen. n. for *Euscepes tonsus* Chev. p. 209, HUSTACHE Faune Colon. français. 3 1929.

*Dorytomus rufus* p. 155, *notaroides* p. 156, spp. n. Japan, KÔNO Ins. mats. 4.

*Dufauviella* gen. n. (Hylobiinae), *heterorostris* sp. n. Guadeloupe p. 215 figs., HUSTACHE Faune Colon. français. 3 1929.

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*Echinapoderus kilimanus* Aur. distinct from *horridus* Boh. (= *schröderi* Voss) p. 575, MARSHALL Ann. Mag. N.H. (10) 6.

*Ectatorrhinus* Lac. (= *Marmarocheilus* Desbr.) *porosus* Wlk. (= *atkinsoni* Desbr.); *trinarius* Pasc. (= *nanus* Hllr.), *galeotes* Pasc. (= *conifer* Hllr.) from *Aryptaenus* p. 566, MARSHALL t.c.

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*Entimus arrogans* Pasc. (= *plebeius* Roel.); *granulatus* L. (= *speciosus* Er.) p. 572, MARSHALL Ann. Mag. N.H. (10) 6.

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*Euphlocis* gen. n. (Ottistirini) p. 464, *dentipes* (type) Australia, *maculatus* New Britain spp. n. p. 465, LEA Proc. Linn. Soc. N.S.W. 55.

*Euscelus (Curculio) biguttatus* F. (= *bipustulosus* Jek.) p. 574, MARSHALL Ann. Mag. N.H. (10) 6.

*Euscepes* key p. 74, *carinirostris* p. 75, *convexipennis* p. 76, *obscurus* spp. n.; *pilosellus* var. n. *parvulus* p. 77 Guadeloupe, HUSTACHE Faune Colon. français. 4.—*E. tonsus* see *Dorytomorpha*; *ursus* see *Paraulosomus*.

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*Heilipus (Curculio) trifasciatus* F. (= *perseae* Barber); *championi* n. n. for *trifasciatus* Champ. nec F. p. 574, MARSHALL t.c.—*H. carinifrons* sp. n. Guadeloupe p. 205, HUSTACHE Faune Colon. français. 3 1929.

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*Lachnopus plumipes* Perroud (= *wolcottii* Mshl.) p. 573, MARSHALL t.c.

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## ERRATA.

Vol. lxvi, 1929, p. 185, 1st col., line 2, for "46" read "47"

" " " " 194, 1st col., line 36 and p. 232, 1st col., line 37 for "OEBENBERGER" read "ROUBAL"

" " " " 213, 2nd col., for "Diametus" read "Diatmetus"

" " " " 214, 1st col., transfer "Dorcadion" to "LAMIIDAE"

" " " " 215, 1st col., for "Heteroglymna" read "Heteroglymma"

" " " " 228, 2nd col., for "Stibaria" read "Stibara"

" " " " 231, 1st col., for "Chrysochus gunnanus" read "Chrysochus gunnanus"

" " " " 234, 2nd col., for "Oethispa" read "Oethispa"



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## ERRATA.

- Vol. lxvi, 1929, p. 255, 1st col., line 15, for "*E. jacobaeae*" begin new paragraph and read "*Euchelia jacobaeae*"  
 " " " " 258, 2nd col., line 37, for "37" read "19"  
 " " " " 263, 1st col., line 14, for "KOMINSKY" read "KOS-MINSKY"  
 " " " " 271, 2nd col., for "*Ortholita*" read "*Ortholitha*"  
 " " " " 272, 1st col., for "*Poecilasthenia*" read "*Poecilasthena*"  
 " " " " 284, 2nd col., transfer "*Anchylopera*" to TORTRICIDAE.

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#### ERRATA.

Vol. lxiii, 1926, p. 386, 1st col., for "*Cephenomyia ovis*" read "*Cephenomyia trompe*"

„ lxiv, 1927, p. 313, 1st col., transfer "*Xorides*" to ICHNEUMONIDAE.

„ „ „ „ 364, 2nd col., transfer *Metelasmus* and *Pterellipsis* to STREBLIDAE.

„ lxv, 1928, p. 318, 2nd col., line 8 and p. 319, 1st col., line 40, for "*Odontoformica*" read "*Odontofornica*."

„ „ 1928, p. 373, 1st col., 7 lines from end, for "Gold Coast" read "Dépt. Côte-d' Or, France"

„ lxvi, 1929, p. 306, 2nd col., line 3, for "*H. revision* . . ." begin new paragraph and read "*Hyloponerus revision* . . ."

„ „ „ „ 308, 1st col., transfer "*Palaeorhiza*" to APIDAE.

„ „ „ „ 311, 2nd col., line 9, for "sep. p. 1" read "p. 264"

„ „ „ „ 342, 1st col., for "*Dasytypia*" read "*Dasyttypia*"

„ „ „ „ 369, 2nd col., line 28, for "p. 349" read "549"





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Supposed fossil Vespinae, BEQUAERT Bull. Brooklyn Ent. Soc. 25 pp. 69-70.

Protihymenoptera of lower Permian, Kansas, CARPENTER Psyche 37 pp. 343-374, 3 pls. 4 figs.

Revision of fossil ants of N. America, CARPENTER Bull. Mus. Comp. Zool. Harvard 70 pp. 1-66, 11 pls.

Agroecomyrmicini trib. n. (Formicidae) p. 34, CARPENTER t.c.

*Aphaenogaster* (Formicidae) *mayri* p. 30, *donisthorpei* p. 31, spp. n. Miocene U.S.A. figs., CARPENTER t.c.

*Archiponera* gen. n. (Formicidae), *wheeleri* sp. n. Miocene Florissant shales p. 27 figs., CARPENTER t.c.

*Camponotus* (Formicidae) *fuscipennis* p. 59, *microcephalus*, *petrifactus* p. 60, spp. n. Miocene U.S.A. figs., CARPENTER t.c.

*Cephalomyrmex* gen. n. (Formicidae) *rotundatus* sp. n. Miocene U.S.A. p. 37 figs., CARPENTER t.c.

*Dolichoderus* (Formicidae) *antiquus* p. 39, *rohweri* p. 40, spp. n. Miocene U.S.A. figs., CARPENTER t.c.

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*Iridomyrmex* (Formicidae) *florissantius* p. 50, *obscurans* p. 51, spp. n. Miocene U.S.A. figs., CARPENTER t.c.

*Liometopum* (Formicidae) *miocenicum* p. 46, *scudder* p. 47, spp. n. Miocene U.S.A. figs., CARPENTER t.c.

*Lithomyrmex* gen. n. (Formicidae) p. 34, *rugosus* (type) p. 35, *striatus* p. 36, spp. n. Miocene U.S.A. figs., CARPENTER t.c.

*Messor* (Formicidae) *sculpturatus* sp. n. Miocene U.S.A. p. 32 figs., CARPENTER t.c.

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*Miomymex* gen. n. for *Formica impactus* Ckll. p. 51; *striatus* sp. n. Miocene U.S.A. p. 54 figs., CARPENTER t.c.

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*Pogonomyrmex* (Formicidae) *fossilis* sp. n. Miocene U.S.A. p. 33 fig., CARPENTER t.c.

*Protazteca* gen. n. (Formicidae) p. 41, *elongata* (type) p. 43, *quadrata* p. 44, *capitata* p. 45, spp. n. Miocene U.S.A. figs., CARPENTER t.c.

*Prothymen elongatus* sp. n. lower Permian Kansas p. 353 fig., CARPENTER Psyche 37.

*Pseudocamponotus* gen. n. (Formicidae), *elkoanus* sp. n. Miocene U.S.A. p. 22 fig., CARPENTER Bull. Mus. Comp. Zool. Harvard 70.

*Pseudomyrma* (Formicidae) *extincta* sp. n. Miocene U.S.A. p. 29 fig., CARPENTER t.c.

## Diptera.

*Phytomyza* (Agromyzidae) *leihe* sp. n. Upper Miocene Germany p. 63 figs., HERING Deuts. ent. Z. 1930.

## Neuroptera.

*Archiconis* gen. n. (Aleuropteryginae), *electrica* sp. n. Oligocene, E. Prussian amber p. 111 figs., ENDERLEIN Arch. klass. phyl. Ent. 1.

*Heminiphethia* gen. n. (Coniopteryginae), *fritschii* sp. n. Oligocene, E. Prussian amber p. 105 fig., ENDERLEIN t.c.

*Pruvostites* gen. n. (Pruvostitidae fam. n.), *takhtachurensis* sp. n. Permian, Basin of Kama p. 381 fig., ZALESKY Bull. Soc. géol. Fr., Paris (4) 28 1929.

## Mecoptera.

Revision of Mecoptera of Lower Permian, Kansas, CARPENTER Bull. Mus. Comp. Zool. Harvard 70 pp. 61-101, 5 pls.

Agetopanorpidae fam. n. (nr. Permodanorpidae) p. 97, CARPENTER t.c.

*Agetopanorpa* gen. n. (Agetopanorpidae), *maculata* sp. n. Permian, Kansas p. 97, CARPENTER t.c.

*Kamopanorpa* Mart. from Permodanorpidae p. 97, CARPENTER t.c.

Lithopanorpidae fam. n. p. 95, CARPENTER t.c.

*Lithopanorpa* gen. n. for *Protopanorpa pusilla* Till. p. 95 figs., CARPENTER t.c.

*Petromantis* Handl. from Permodanorpidae p. 97, CARPENTER t.c.

*Protopanorpa pusilla* see *Lithopanorpa*.

## Thysanoptera.

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*Cephenothrips* gen. n. (Phloeothripidae) p. 135, *laticeps* sp. n. amber p. 136, PRIESNER t.c.

*Lipsanothrips* gen. n. (Thripidae), *skwarrae* sp. n. amber p. 119, PRIESNER t.c.

*Opadothrips sexspinosus* sp. n. amber p. 115, PRIESNER t.c.

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*Protoxythrips* subgen. n. see *Oxythrips*.

*Taeniothrips inclusus*, *consobrinus* p. 131, *prior* p. 132 spp. n.; *repositus* f. n. *sedecimsetis* p. 133 amber, PRIESNER t.c.

*Telothrips* gen. n. (Thripidae) p. 116, *klebsi* (type) p. 117, *minor* p. 118, spp. n. amber, PRIESNER t.c.

*Trehermiella fossilis* sp. n. amber p. 136, PRIESNER t.c.

## Isoptera.

Fossil termite pellets from the Seminole Pleistocene, LIGHT Univ. Calif. Pub. Geol. 19 pp. 75-80, 2 pls.

## Palaeodictyoptera.

*Kallenbergia* gen. n. (Dictyoneuridae) p. 147, *handlirschi* sp. n. Saar p. 148 figs., GUTHÖRL N. Jahrb. Min. Geol. Paläont. Stuttgart 64 (B).

*Lithosialis daviesii* p. 10, *truemani* p. 13, spp. n. S. Wales figs., BOLTON Quart. J. Geol. Soc. Lond. 86.

*Polioptenus willerti* sp. n. Saar p. 151 figs., GUTHÖRL N. Jahrb. Min. Geol. Paläont. Stuttgart 64 (B).

Saarlandiidae fam. n. p. 154, GUTHÖRL t.c.

*Saarlandia* gen. n. (Saarlandiidae), *flexisubcosta* sp. n. Saar p. 154 fig., GUTHÖRL t.c.

## Odonata.

*Protothore* gen. n. (Calopterygidae), *explicata* sp. n. U.S.A. p. 50 figs., COCKERELL Ent. News 41.

## Orthoptera.

*Archimylacris* (Blattidae) *scalaris* sp. n. S. Wales p. 16 figs., BOLTON Quart. J. Geol. Soc. Lond. 86.

*Friedichsthalia* gen. n. (Blattariae, Archimylacridae), *blatteri* sp. n. p. 158 figs., GUTHÖRL N. Jahrb. Min. Geol. Paläont. Stuttgart 64 (B).

*Heinitzia* gen. n. (Blattariae, Archimylacridae), *bildstocki* sp. n. Saar p. 156 fig., GUTHÖRL t.c.

Idelidae fam. n. (nr. Sthenaropodidae) p. 20, ZALESSKY Ann. Soc. géol. Nord 54.

*Idelia* gen. n. p. 20, *permiakovi* sp. n. p. 21 Permian, Kama figs., ZALESSKY t.c.

*Kunguroblattina* gen. n. (Archimylacridae), *arcuata* sp. n. Perm p. 36 fig., MARTYNOV Annu. Soc. paléont. Russie 8.

*Paleuthygramma* gen. n. (Euthygrammidae) p. 42, *tenuicornis* sp. n. Perm p. 44 figs., MARTYNOV t.c.

*Phylomylacris* (Blattidae) *abrupta* p. 27, *membranacea* p. 33, *parallelus* p. 35, spp. n. S. Wales figs., BOLTON Quart. J. Geol. Soc. Lond. 86.

*Sardyclatta* gen. n. (Archimylacridae), *tikhvinskii* sp. n. Permian, Sardyk p. 387 figs., ZALESSKY Bull. Soc. géol. Fr., Paris (4) 28 1929.

*Soomylacris* (Blattidae) *northi* p. 23, *strahani* p. 25, spp. n. S. Wales figs., BOLTON Quart. J. Geol. Soc. Lond. 86.

## ERRATA.

Vol. lvii, 1920, p. 274, 1st col., 7 lines from end, for "19" read "10"

Vol. lxiv, 1927, p. 400, 1st col., transfer "*Neureclipsis*" to Trichoptera

" " " " 401, 2nd col., line 25, for "36" read "26"

" " " " " 7 lines from end, for "no date" read "1918"

Vol. lxvi, 1929, p. 372, 1st col., transfer "*Leuctra*" to Plecoptera

" " " " " 16 lines from end, for "MOSELEY" read "MOSELY"

" " " " 375, 1st col., for "*Nusulala*" read "*Nusalala*"

" " " " 395, 2nd col., line 33 for "TABB" read "TANABE"

" " " " 410, 2nd col., line 1 for "*taterrimu*" read "*aterrima*"

" " " " 431, 1st col., 15 lines from end for "BEIER" read "SILVESTRI in BEIER"

" " " " 434, 2nd col. transfer "*Gesomyrmer*" to FORMICIDAE, p. 306





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